

California Air Resources Board



Reducing Emissions from
On-Road Heavy-Duty Diesel Trucks Dedicated to
Goods Movement at California Ports

Public Consultation Meeting
September 8, 2006

Air Resources Board
California Environmental Protection Agency



Agenda

- Background
 - Goods Movement
- Port Information
- ARB's "Port Truck Report"
- San Pedro CAAP/Truck Replacement Programs
- On-Road Vehicles Control Measure
- Comments – ARB Draft Report
- Regulatory Timeline
- Contact Information
- Open Discussion



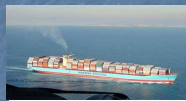
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Background

- ARB Emission Reduction Plan for Ports and Goods Movement in California

- Emission Sources:

- Ships
- Locomotives
- Harbor Craft
- Cargo Handling Equipment
- Heavy Duty Diesel Trucks



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Port Information

- Health Risk
 - Greater than 10 in a Million
- Emission Inventory
 - Statewide Emissions - Goods Movement :
 - Diesel PM ~ 50 tons per day (TPD)
 - NOx ~ 1,100 TPD
 - Port Truck Emissions:
 - Diesel PM ~ 1.6 TPD
 - NOx ~ 19 TPD

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Port Information (cont.)

Annual Container Volume for
Ports of Oakland, Long Beach
and Los Angeles



2005	2020 (Estimated)
9 Million	23 Million

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Port Information (cont.)

- Port Trucks:

Population*	~12,000
Age Distribution**	Older than avg.

* Caltrans and Ports 2002 data
** 2002 Ports report



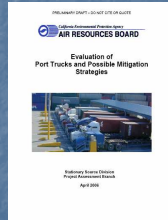
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ARB's Port Truck Report

■ Goals/Objectives – 3 Initial Strategies

■ Strategy 1:

- Replace pre-1994 trucks
- Install DPFs
- Low Cost
- Low NOx reductions



■ Strategy 2:

- Replace pre-2003 trucks
- Install DPFs
- High Cost
- High NOx reductions

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ARB's Port Truck Report (cont.)

■ Strategy # 3:

- Replace the oldest trucks and install controls on the entire fleet.
- Establish emission criteria for trucks entering port service.
- Beginning 2017 and by 2019, trucks will further reduce emissions by meeting 2010 engine standards
- Evaluate potential incentives

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ARB's Port Truck Report (cont.)

■ Retrofit Technologies

- Verification of Diesel Emission Control Strategies

• Hardware Diesel Emission Control Strategies:

- Diesel Particulate Filters:
 - ✧ Passive
 - ✧ Active
- NOx Catalyst
- Fuel Borne Catalyst
- Flow through Filters



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San Pedro CAAP & Truck Replacement Programs

- San Pedro Clean Air Action Plan
- Gateway Cities
~ 400 Trucks Replaced
- Port of Oakland
~ 15 Trucks Replaced



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On-Road Vehicles Control Measure

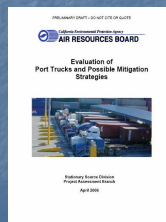
- Will effect all heavy duty diesel vehicles with GVWR greater than 14,000 lbs.
- Board Consideration – Mid 2007
- Website:
<http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>



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Comments – ARB Draft Report

- Truck Owners Economics
- Funding
- Accurate Data
 - Additional Research
- Why Two Plans
- Implementation
- Enforcement



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Comments – ARB Draft Report (cont.)

- Fleet Fluidity
- Outreach
- Replacement Truck Availability
- Fleet/Container
Growth/Infrastructure
- Legal Authority

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Regulatory Timelines:

- Starting 2006: Outreach with stakeholders
- Fall 2007: Board consideration

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Website:

<http://www.arb.ca.gov/msprog/onroad/porttruck/porttruck.htm>

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Questions / Comments



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